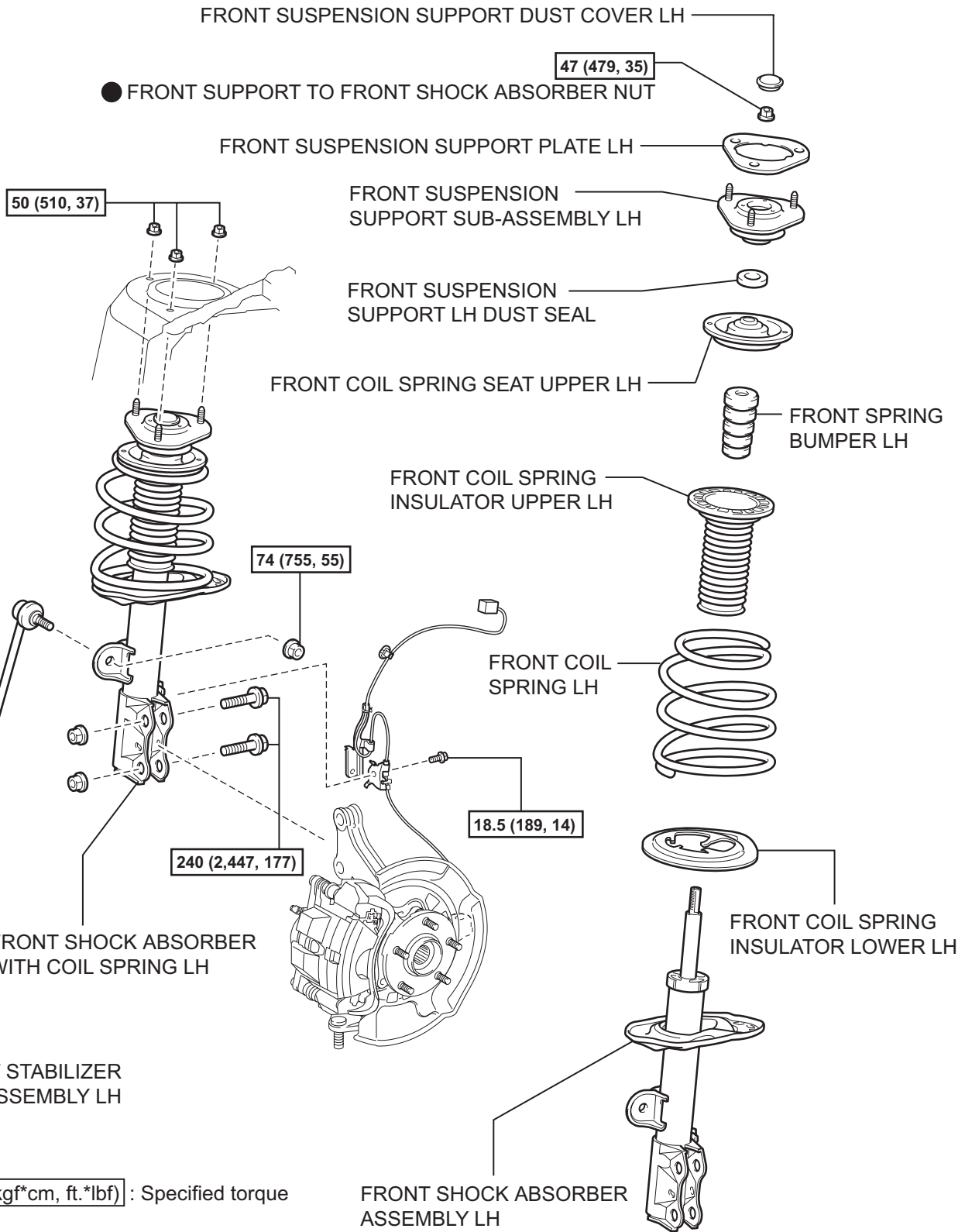


FRONT SHOCK ABSORBER WITH COIL SPRING COMPONENTS



REMOVAL

HINT:

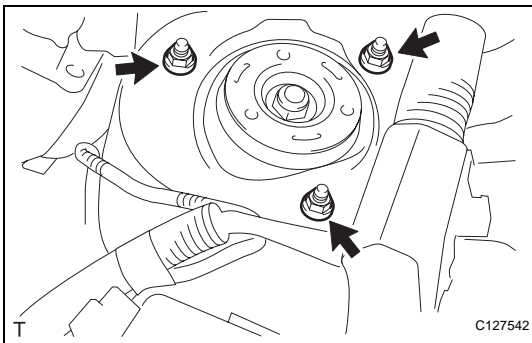
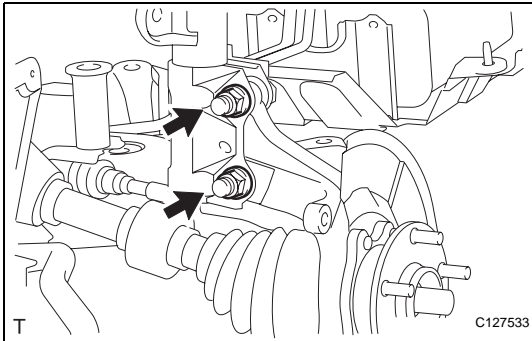
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. **REMOVE FRONT WHEEL**
2. **DISCONNECT FRONT SPEED SENSOR LH**
3. **DISCONNECT FRONT STABILIZER LINK ASSEMBLY LH**
4. **REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING LH**

- (a) Remove the 2 bolts and 2 nuts, and disconnect the shock absorber from the steering knuckle.

HINT:

While fixing the nuts in place, loosen and remove the bolts.



- (b) Remove the 3 nuts and shock absorber with coil spring.

DISASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT SUSPENSION SUPPORT PLATE LH

(a) Remove the plate from the shock absorber.

2. REMOVE FRONT SUSPENSION SUPPORT DUST COVER LH

- (a) Using a screwdriver, remove the dust cover from the suspension support.

HINT:

Tape the screwdriver tip before use.

3. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

- (a) Install 2 nuts and 2 bolts to the bracket at the lower portion of the shock absorber and secure it with a vise.

- (b) Using SST, compress the coil spring.

SST 09727-30021 (09727-00010, 09727-00021, 09727-00031)

HINT:

To prevent the coil spring from being damaged, wind vinyl tape on the coil spring.

NOTICE:

- When holding the shock absorber with the coil spring removed, do not hold it by the spring lower seat. Also, do not knock the spring lower seat.
- Do not use an impact wrench which will damage SST.

- (c) Using SST to hold the spring upper seat, remove the nut.

SST 09729-22031

4. REMOVE FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

- (a) Remove the suspension support from the shock absorber.

5. REMOVE FRONT SUSPENSION SUPPORT LH DUST SEAL

- (a) Remove the dust seal from the shock absorber.

6. REMOVE FRONT COIL SPRING SEAT UPPER LH

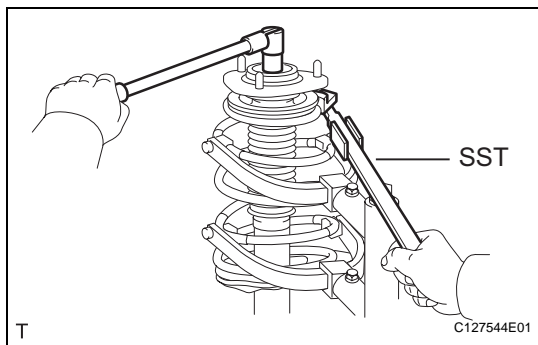
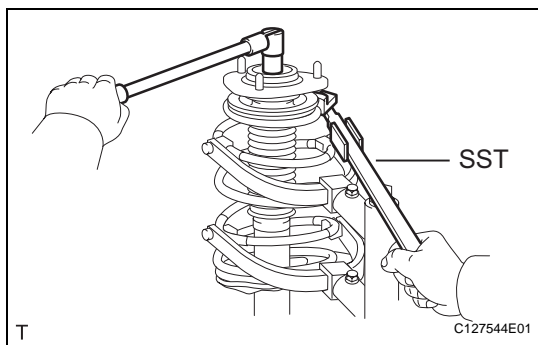
- (a) Remove the seat upper from the shock absorber.

7. REMOVE FRONT COIL SPRING INSULATOR UPPER LH

- (a) Remove the insulator upper from the shock absorber.

8. REMOVE FRONT SPRING BUMPER LH

- (a) Disengage the spring bumper from the spring seat.

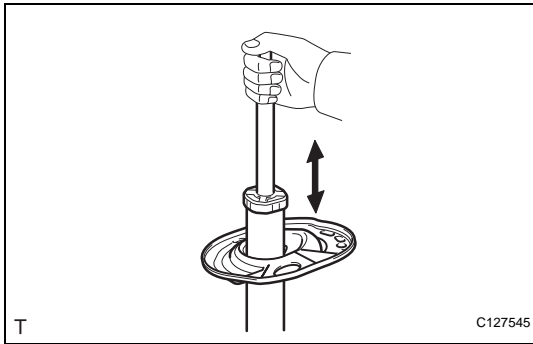


9. REMOVE FRONT COIL SPRING LH

- (a) Remove the coil spring from the shock absorber.
- (b) Remove SST from the coil spring.

10. REMOVE FRONT COIL SPRING INSULATOR LOWER LH

- (a) Remove the insulator lower from the shock absorber.

**INSPECTION****1. INSPECT FRONT SHOCK ABSORBER ASSEMBLY LH**

- (a) Compress and extend the shock absorber rod 4 times or more. Check that there is no abnormal resistance or unusual sound during the operation. If there is any abnormality, replace the shock absorber assembly with a new one.

NOTICE:

When disposing of the shock absorber, see DISPOSAL (see page [SP-13](#)).

REASSEMBLY

HINT:

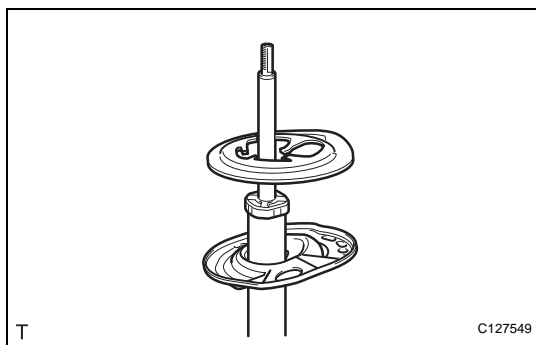
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. INSTALL FRONT COIL SPRING INSULATOR LOWER LH

- (a) Install the insulator lower to the shock absorber.

2. INSTALL FRONT SPRING BUMPER LH

- (a) Engage the spring bumper to the spring seat.



3. INSTALL FRONT COIL SPRING LH

- (a) Using SST, compress the coil spring.

SST 09727-30021 (09727-00010, 09727-00021, 09727-00031)

HINT:

To prevent the coil spring from being damaged, wind vinyl tape around the coil spring.

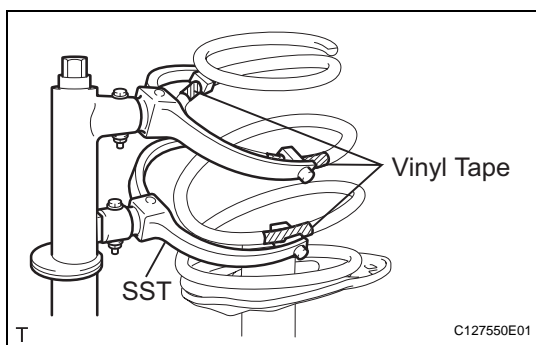
NOTICE:

Do not use an impact wrench which will damage SST.

- (b) Install the coil spring to the shock absorber.

HINT:

Fit the lower end of the coil spring to the gap of the lower spring seat.



4. INSTALL FRONT COIL SPRING INSULATOR UPPER LH

- (a) Install the insulator upper to the shock absorber.

5. INSTALL FRONT COIL SPRING SEAT UPPER LH

- (a) Install the seat upper to the shock absorber.

6. INSTALL FRONT SUSPENSION SUPPORT LH DUST SEAL

- (a) Install the dust seal to the shock absorber.

7. INSTALL FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

- (a) Install the suspension support to the shock absorber.

8. INSTALL FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

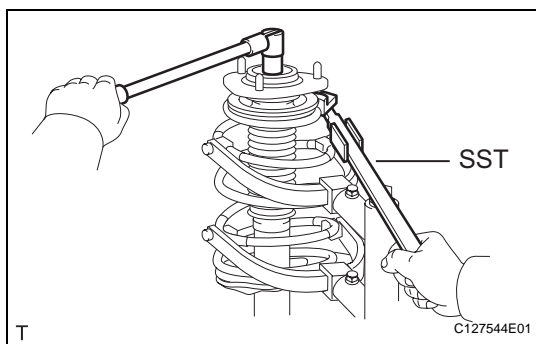
- (a) Using SST to hold the spring upper seat, install a new nut.

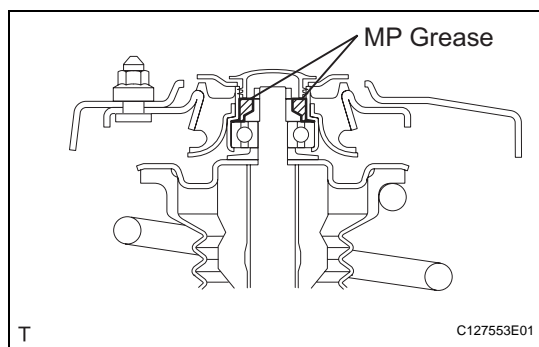
SST 09729-22031

Torque: 47 N*m (475 kgf*cm, 34 ft.*lbf)

- (b) Remove SST.

SST 09727-30021 (09727-00010, 09727-00021, 09727-00031)





(c) Pack the suspension support with MP grease.

9. INSTALL FRONT SUSPENSION SUPPORT DUST COVER LH

(a) Install the dust cover to the shock absorber.

10. INSTALL FRONT SUSPENSION SUPPORT PLATE LH

(a) Install the support plate to the shock absorber with coil spring.

INSTALLATION

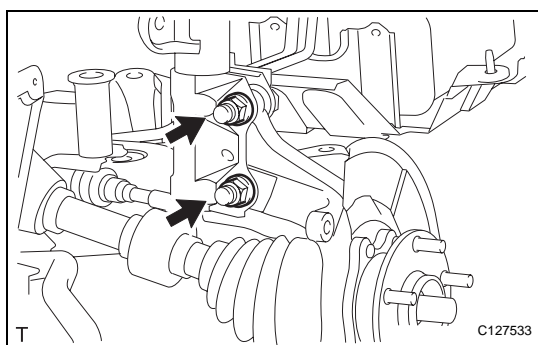
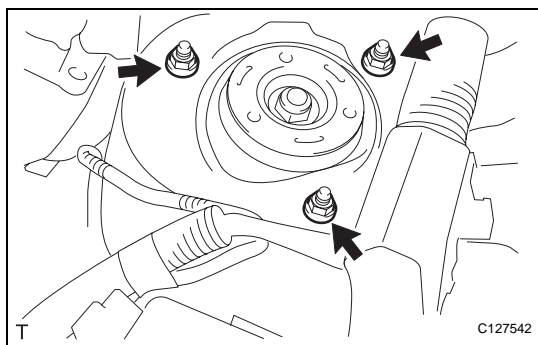
HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING LH

- (a) Install the front shock absorber with coil spring (upper side) with the 3 nuts.

Torque: 50 N*m (510 kgf*cm, 37 ft.*lbf)



- (b) Install the front shock absorber with coil spring to the steering knuckle with the 2 bolt and 2 nuts.

Torque: 240 N*m (2,447 kgf*cm, 177 ft.*lbf)

NOTICE:

Do not tighten the bolts.

2. CONNECT FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-31](#))

3. CONNECT FRONT SPEED SENSOR LH (See page [BC-193](#))

4. INSTALL FRONT WHEEL

Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)

5. STABILIZE SUSPENSION

- (a) Lower the vehicle.
(b) Press down on the vehicle several times to stabilize the suspension.

6. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

- (a) Inspect and adjust the front wheel alignment (see page [SP-3](#)).

DISPOSAL

1. DISPOSE OF FRONT SHOCK ABSORBER ASSEMBLY LH

- (a) Fully extend the shock absorber piston rod, and clamp it in a vise at an angle.
(b) Using a drill or similar tool, gradually make a hole in area A to discharge the gas inside of the absorber.

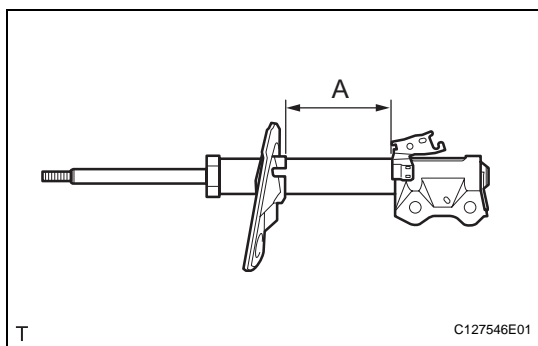
CAUTION:

As metal debris may be blown outward by the gas, you must

- Wear protective glasses.
- Cover the area being cut.

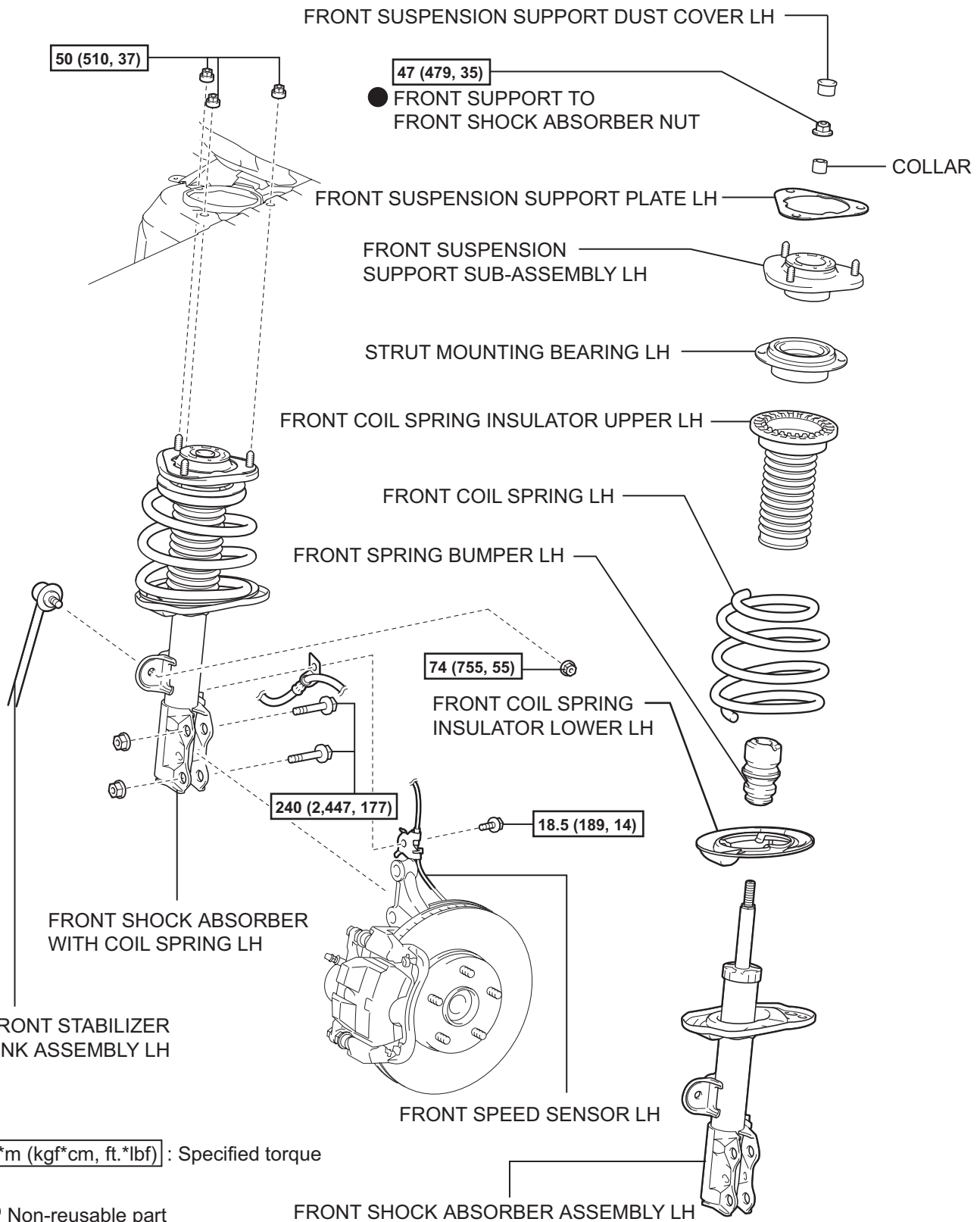
NOTICE:

The gas is colorless and harmless.



FRONT SHOCK ABSORBER WITH COIL SPRING (for Sport Package)

COMPONENTS



REMOVAL

HINT:

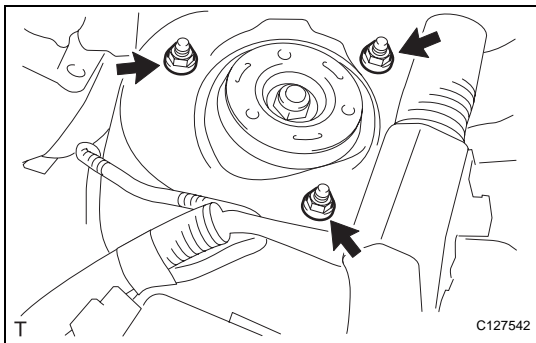
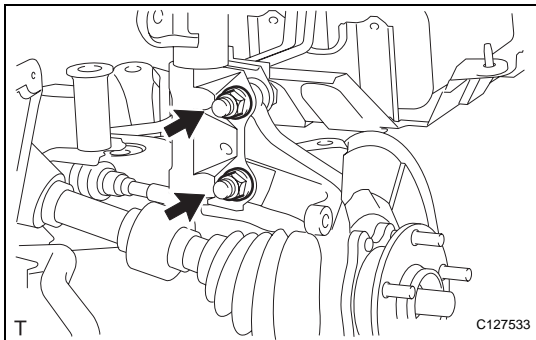
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT WHEEL
2. REMOVE FRONT SPEED SENSOR LH (See page [BC-191](#))
3. REMOVE FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-30](#))
4. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING LH

- (a) Remove the 2 bolts and 2 nuts, and disconnect the shock absorber from the steering knuckle.

HINT:

While fixing the nuts in place, loosen and remove the bolts.



- (b) Remove the 3 nuts and shock absorber with coil spring.

DISASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT SUSPENSION SUPPORT PLATE LH

- (a) Remove the plate from the shock absorber.

2. REMOVE FRONT SUSPENSION SUPPORT DUST COVER LH

- (a) Using a screwdriver, remove the dust cover from the suspension support.

HINT:

Tape the screwdriver tip before use.

3. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

- (a) Install 2 nuts and 2 bolts to the bracket at the lower portion of the shock absorber and secure it with a vise.

- (b) Using SST, compress the coil spring.

SST 09727-30021 (09727-00010, 09727-00021, 09727-00031)

HINT:

To prevent the coil spring from being damaged, wind vinyl tape on the coil spring.

NOTICE:

- When holding the shock absorber with the coil spring removed, do not hold it by the spring lower seat. Also, do not knock the spring lower seat.
- Do not use an impact wrench which will damage SST.

- (c) Using SST to hold the suspension support, remove the nut.

SST 09729-22031

4. REMOVE COLLAR

- (a) Remove the collar from the suspension support.

5. REMOVE FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

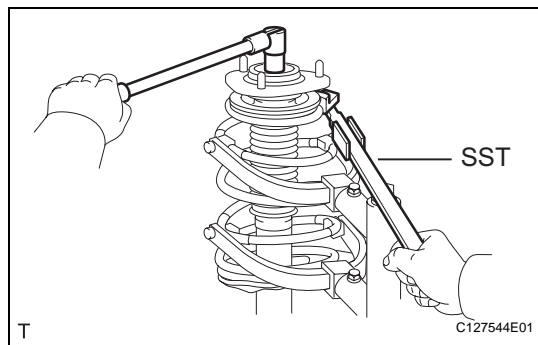
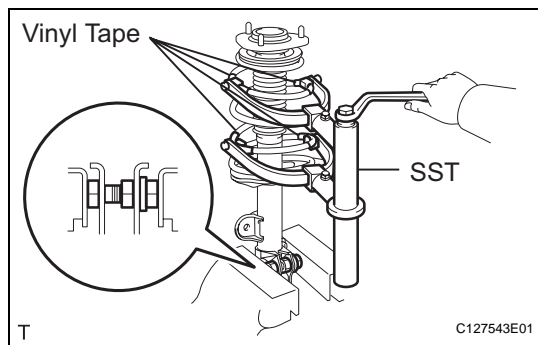
- (a) Remove the suspension support from the shock absorber.

6. REMOVE STRUT MOUNTING BEARING LH

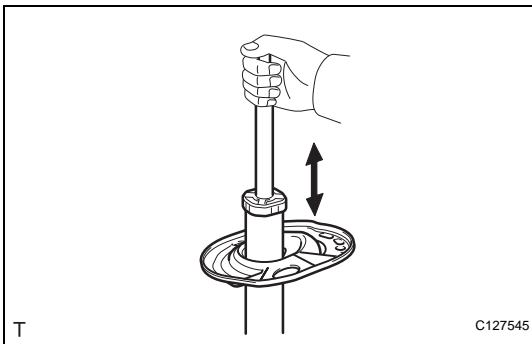
- (a) Remove the mounting bearing from the suspension support.

NOTICE:

- When removing the bearing, the suspension support may become stuck. Use a screwdriver or equivalent to remove the bearing.
- Make sure not to use excessive force when removing the bearing as it may come apart.



7. **REMOVE FRONT COIL SPRING INSULATOR UPPER LH**
 - (a) Remove the insulator upper from the shock absorber.
8. **REMOVE FRONT SPRING BUMPER LH**
 - (a) Remove the spring bumper from the shock absorber.
9. **REMOVE FRONT COIL SPRING LH**
 - (a) Remove the coil spring from the shock absorber.
 - (b) Remove SST from the coil spring.
10. **REMOVE FRONT COIL SPRING INSULATOR LOWER LH**
 - (a) Remove the insulator lower from the shock absorber.



INSPECTION

1. **INSPECT FRONT SHOCK ABSORBER ASSEMBLY LH**
 - (a) Compress and extend the shock absorber rod 4 times or more. Check that there is no abnormal resistance or unusual sound during the operation. If there is any abnormality, replace the shock absorber assembly with a new one.

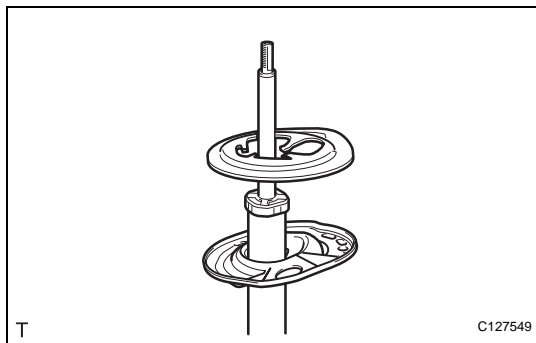
NOTICE:

When disposing of the shock absorber, see DISPOSAL (see page [SP-19](#)).

REASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

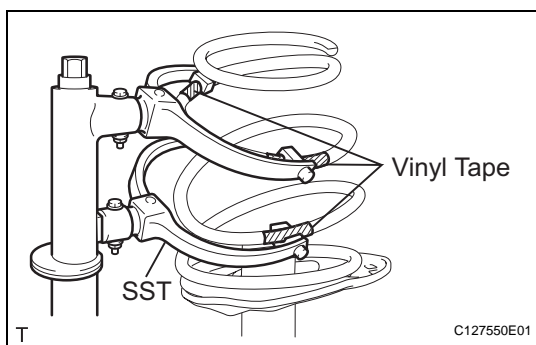


1. INSTALL FRONT COIL SPRING INSULATOR LOWER LH

- (a) Install the insulator lower to the shock absorber.

2. INSTALL FRONT SPRING BUMPER LH

- (a) Install the spring bumper to the shock absorber.



3. INSTALL FRONT COIL SPRING LH

- (a) Using SST, compress the coil spring.

SST 09727-30021 (09727-00010, 09727-00021, 09727-00031)

HINT:

To prevent the coil spring from being damaged, wind vinyl tape around the coil spring.

NOTICE:

Do not use an impact wrench which will damage SST.

- (b) Install the coil spring to the shock absorber.

HINT:

Fit the lower end of the coil spring to the gap of the lower spring seat.

4. INSTALL FRONT COIL SPRING INSULATOR UPPER LH

- (a) Install the insulator upper to the shock absorber.

5. INSTALL STRUT MOUNTING BEARING LH

- (a) Install the mounting bearing to the insulator upper.

6. INSTALL COLLAR

- (a) Install the collar to the suspension support side.

7. INSTALL FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

- (a) Install the suspension support to the shock absorber.

8. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

- (a) Using SST to hold the spring upper seat, install a new nut.

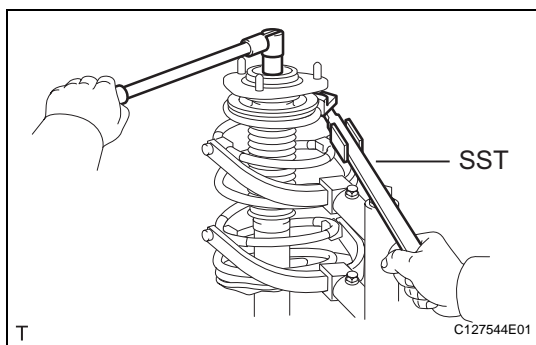
SST 09729-22031

- (b) Remove SST.

SST 09727-30021 (09727-00021, 09727-00031)

NOTICE:

When removing SST, make sure that the suspension support is not in an inclined position, as the bearing may come apart.



9. INSTALL FRONT SUSPENSION SUPPORT DUST COVER LH

- (a) Install the dust cover to the shock absorber.

10. INSTALL FRONT SUSPENSION SUPPORT PLATE LH

- (a) Install the support plate to the shock absorber with coil spring.

INSTALLATION

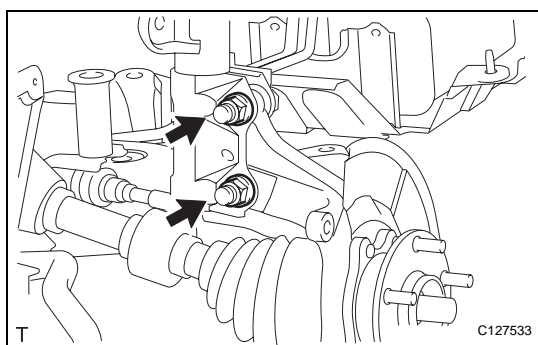
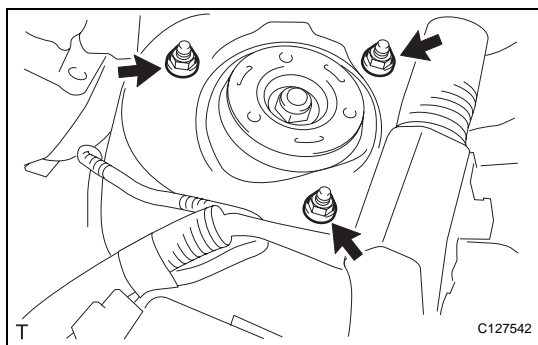
HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING

- (a) Install the front shock absorber with coil spring (upper side) with the 3 nuts.

Torque: 50 N*m (510 kgf*cm, 37 ft.*lbf)



- (b) Install the front shock absorber with coil spring to the steering knuckle with the 2 bolt and 2 nuts.

Torque: 240 N*m (2,447 kgf*cm, 177 ft.*lbf)

NOTICE:

Do not tighten the bolts.

2. INSTALL FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-31](#))

3. INSTALL FRONT SPEED SENSOR LH (See page [BC-193](#))

4. INSTALL FRONT WHEEL

Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)

5. STABILIZE SUSPENSION

- (a) Lower the vehicle.
(b) Press down on the vehicle several times to stabilize the suspension.

6. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

- (a) Inspect and adjust the front wheel alignment (see page [SP-3](#)).

DISPOSAL

1. DISPOSE OF FRONT SHOCK ABSORBER ASSEMBLY LH

- (a) Fully extend the shock absorber piston rod, and clamp it in a vise at an angle.
(b) Using a drill or similar tool, gradually make a hole in area A to discharge the gas inside of the absorber.

CAUTION:

As metal debris may be blown outward by the gas, you must.

- Wear protective glasses.
- Cover the area being cut.

NOTICE:

The gas is colorless and harmless.

